Physica C 178 (1991) 461–464
North-Holland

PHYSICA C

Author Index to Volume 178

Abrashev, M.V., L.N. Bozukov and M.N. Iliev, Destruction of non-superconducting $YBa_2Cu_3O_{6.3}$ and $PrBa_2Cu_3O_{6.8}$ due to hydrogenation: Raman scattering and X-ray diffraction study **178**, 317
Adrian, H., see M. Huth **178**, 203
Alekseevskii, N.E. and S.F. Kim, Modulation technique for measuring critical current density in single crystals of high-T_c superconductors **178**, 89
Altenburg, H., see J. Hauck **178**, 405
Amelinckx, S., see T. Krekels **178**, 383
Asayama, K., G.-Q. Zheng, Y. Kitaoka, K. Ishida and K. Fujiwara, NMR study of high-T_c superconductors **178**, 281
Awana, V.P.S., see S.B. Samanta **178**, 171

Babu, V.S., see J. Zhao **178**, 432
Bianconi, A., see C. Li **178**, 421
Bischof, B., see J. Hauck **178**, 405
Blumenfeld, R., The functional form of the $T_c(x)$ line in the phase diagram of high temperature superconductors **178**, 119
Bobrov, V.S. and M.A. Lebyodkin, Possible twin-boundary effect upon temperature dependence of critical current near T_c of high-T_c superconductors **178**, 411
Bouffard, S., see V. Hardy **178**, 255
Bozukov, L.N., see M.V. Abrashev **178**, 317
Braithwaite, D., G. Chouteau, G. Martinez, J.L. Hodeau, M. Marezio, J. Karpinski, E. Kaldis, S. Rusiecki and E. Jilek, The superconducting properties of $YBa_2Cu_4O_8$ single crystals under hydrostatic pressure (up to 9.5 GPa) **178**, 75
Buchgeister, M., P. Herzog, S.M. Hosseini, K. Kopitzki and D. Wagener, Oxygen evolution from $ABa_2Cu_3O_{7-\delta}$ high-T_c superconductors with A = Yb, Er, Y, Gd, Eu, Sm, Nd and La **178**, 105
Burgäzy, F., see A. Kottmann **178**, 125

Caignaert, V., see C. Michel **178**, 29
Calemczuk, R., see S. De Brion **178**, 225
Carbotte, J.P., see H. Chi **178**, 15
Carlson, K.D., see J.E. Schirber **178**, 137
Cavin, O.B., see T.B. Lindemer **178**, 93
Chen, X.-F., see T.M. Tritt **178**, 296
Chi, H. and J.P. Carbotte, Extended s-wave superconductor with impurities **178**, 15
Chouteau, G., see D. Braithwaite **178**, 75

De Brion, S., R. Calemczuk and J.Y. Henry, Flux line dynamics in crystal $YBa_2Cu_3O_{7-\delta}$ studied by mechanical measurements **178**, 225
Degterov, S.A. and G.F. Voronin, Phase equilibria and stability of superconductors in the Y–Ba–Cu–O system **178**, 213
Della Longa, S., see C. Li **178**, 421
Denker, S., see J. Hauck **178**, 405
Djakonov, V.P., E.E. Zubov, L.P. Kozeeva, G.G. Levchenko, V.I. Makrovich, A.D. Pavlyuk and I.M. Fita, Field-induced spin-reorientation transitions in $GdBa_2Cu_3O_{7-\delta}$ single crystal **178**, 221
Dolgov, O.V., see S.V. Shulga **178**, 266
Doria, M.M., Fast convergent free energy expansion for uniaxial superconductors in the London approximation **178**, 51
Droste, E., see J. Hauck **178**, 405
Dutta, P.K., see S.B. Samanta **178**, 171

Ehrlich, A.C., see T.M. Tritt **178**, 296

Fang, Y., see A. Kottmann **178**, 125
Fedorov, S.A., see I.M. Vitebskii **178**, 189
Feenstra, R., see T.B. Lindemer **178**, 93
Fischer, K.H., Vortices in layered high-T_c superconductors **178**, 161
Fishman, M.R., see U.P. Oppenheim **178**, 26
Fita, I.M., see V.P. Djakonov **178**, 221
Fontaine, A., see F. Studer **178**, 324
Forster, K., see V. Selvamanickam **178**, 147
Fortune, N.A., K. Murata, Y. Yokoyama, M. Ishibashi and Y. Nishihara, The effect of cerium doping and oxygen treatment of $Nd_{2-x}Ce_xCuO_4$. Hall effect measurements **178**, 437
Franck, J.P., see T.M. Tritt **178**, 296
Fujita, T., see T. Nojima **178**, 140
Fujiwara, K., see K. Asayama **178**, 281
Fukuda, T., see T. Kajitani **178**, 397

Gangopadhyay, A.K. and T.O. Mason, Solubility of Ag in $YBa_2Cu_3O_{6+y}$ and its effect on superconducting properties **178**, 64
Garg, K.B., see K.V.R. Rao **178**, 352
Gasparov, V.A. and A.P. Oganesyan, Temperature dependence of the penetration depth in epitaxial $V_1Ba_2Cu_3O_{7-x}$ thin films **178**, 445
Gasparov, V.A., Berezinskii–Kosterlitz–Thouless transition and fluctuation paraconductivity in $Y_1Ba_2Cu_3O_7$ single crystal films **178**, 449
Gillespie, D.J., see T.M. Tritt **178**, 296
Gmelin, E., see S.B. Samanta **178**, 171
Groult, D., see V. Hardy **178**, 255
Grovenor, C.R.M., see L.T. Romano **178**, 41
Gupta, L.C., see A. Sundaresan **178**, 193

Gupta, M., see R.P. Gupta **178**, 345
Gupta, M., see R.P. Gupta **178**, 414
Gupta, R.P. and M. Gupta, Pressure dependence of the hole concentration in the T^*-phase superconductor $Nd_{2-x-y}Ce_xSr_yCuO_4$ **178**, 345
Gupta, R.P. and M. Gupta, Absence of pressure-induced charge transfer in superconducting $YBa_2Cu_3O_7$ **178**, 414

Hardy, V., D. Groult, J. Provost, M. Hervieu, B. Raveau and S. Bouffard, GeV-heavy ion irradiation effects in thallium-based superconducting copper oxides **178**, 255
Hauck, J., H. Altenburg, B. Bischof, S. Denker, E. Droste, S. Ipta and J. Plewa, Variation of the oxygen content of lead-containing cuprates **178**, 405
He, Y., see Y. Wang **178**, 287
Henry, J.Y., see S. De Brion **178**, 225
Hervieu, M., see C. Michel **178**, 29
Hervieu, M., see V. Hardy **178**, 255
Herzog, P., see M. Buchgeister **178**, 105
Hiraga, K., see T. Kajitani **178**, 397
Hodeau, J.L., see D. Braithwaite **178**, 75
Hosoya, S., see T. Kajitani **178**, 397
Hosseini, S.M., see M. Buchgeister **178**, 105
Hu, S.H., see L. Luo **178**, 11
Hu, W.X., see L. Luo **178**, 11
Huth, M., M. Schmitt and H. Adrian, Influence of composition and long term annealing on the weak link behaviour of the high-T_c superconductor (Bi, Pb)$_{2+x}Sr_{2-y}Ca_{2+y}Cu_{3+z}O_{10+\delta}$ **178**, 203

Iguchi, I. and Z. Wen, Tunnel gap structure and tunneling model of the anisotropic YBaCuO/I/Pb junctions **178**, 1
Iliev, M.N., see M.V. Abrashev **178**, 317
Inameti, E.E., see M.S. Raven **178**, 275
Ipta, S., see J. Hauck **178**, 405
Ishibashi, M., see N.A. Fortune **178**, 437
Ishida, K., see K. Asayama **178**, 281
Ishida, T., K. Kanoda, T. Takahashi and K. Koga, Origin of spin susceptibility in $Bi_2Sr_2Ca_{n-1}Cu_nO_{2n+4}$ (n=1,2,3) **178**, 231
Ishida, T., S. Okayasu and Y. Kazumata, Bulk critical temperature enhancement of $Bi_{1.8}Pb_{0.2}Sr_2CaCu_2O_8$ by phenol treatment **178**, 301
Iyer, R.M., see P.V.P.S.S. Sastry **178**, 110

Jha, S.S., see M.R. Press **178**, 305
Jilek, E., see D. Braithwaite **178**, 75
Jilek, E., see T. Krekels **178**, 383
Jung, J., see T.M. Tritt **178**, 296

Kajitani, T., K. Hiraga, S. Hosoya, T. Fukuda, K. Oh-Ishi and Y. Syono, Structural study of oxygen-saturated or quenched $Pr_{2-x}Ce_xCuO_4$ with $x \leqslant 0.15$ **178**, 397
Kaldis, E., see D. Braithwaite **178**, 75
Kaldis, E., see T. Krekels **178**, 383
Kambe, S., see Y. Murakoshi **178**, 71
Kaneko, T., H. Yamauchi and S. Tanaka, Zero-resistance temperature of Tl-based "2223" superconductor increased to 127 K **178**, 377
Kanoda, K., see T. Ishida **178**, 231
Karpinski, J., see D. Braithwaite **178**, 75
Karpinski, J., see T. Krekels **178**, 383
Katz, M., see U.P. Oppenheim **178**, 26
Kawai, M., see Y. Murakoshi **178**, 71
Kazumata, Y., see T. Ishida **178**, 301
Kim, S.F., see N.E. Alekseevskii **178**, 89
Kini, A.M., see J.E. Schirber **178**, 137
Kitaoka, Y., see K. Asayama **178**, 281
Koga, K., see T. Ishida **178**, 231
Kopitzki, K., see M. Buchgeister **178**, 105
Koren, G., see U.P. Oppenheim **178**, 26
Kostyrko, T., Nuclear magnetic relaxation and d-wave pairing in an extended Hubbard model with diagonal disorder **178**, 182
Kottmann, A., F. Burgäzy, D.J. Lam, Y. Fang, P. Lamparter and S. Steeb, Partial densities of states with polarized oxygen Kα X-ray emission of $YBa_2Cu_3O_{7-\delta}$ **178**, 125
Kozeeva, L.P., see V.P. Djakonov **178**, 221
Krekels, T., G. Van Tendeloo, S. Amelinckx, J. Karpinski, S. Rusiecki, E. Kaldis and E. Jilek, New polytypoids of the Y–Ba–Cu–O 123 compound **178**, 383
Kronmüller, H., see H. Theuss **178**, 37
Kwok, W.-K., see J.E. Schirber **178**, 137

Lam, D.J., see A. Kottmann **178**, 125
Lamparter, P., see A. Kottmann **178**, 125
Lebyodkin, M.A., see V.S. Bobrov **178**, 411
Levchenko, G.G., see V.P. Djakonov **178**, 221
Levinson, M., see S.R. Su **178**, 81
Li, B., see Y. Wang **178**, 287
Li, C., M. Pompa, S. Della Longa and A. Bianconi, Electronic structure of La_2CuO_4 by joint analysis of O K and Cu K and L_3 edge X-ray absorption spectra **178**, 421
Li, L., see Y. Wang **178**, 287
Lindemer, T.B., F.A. Washburn, C.S. MacDougall, R. Feenstra and O.B. Cavin, Decomposition of $YBa_2Cu_3O_{7-x}$ and $YBa_2Cu_4O_8$ for $p_{O_2} \leqslant 0.1$ MPa **178**, 93
Liu, W.H., see L. Luo **178**, 11
Luo, L., Y.H. Zhang, S.H. Hu, W.H. Liu, G.L. Zhang and W.X. Hu, Gamma radiation effects on some properties of YBCO **178**, 11

MacDougall, C.S., see T.B. Lindemer **178**, 93
Mackenzie, A.P., Accurate metal and oxygen analyses of cuprate single crystals by electron probe microanalysis **178**, 365
Maignan, A., see C. Michel **178**, 29
Makrovich, V.I., see V.P. Djakonov **178**, 221
Maksimov, E.G., see S.V. Shulga **178**, 266
Marezio, M., see D. Braithwaite **178**, 75
Marone, M., see T.M. Tritt **178**, 296
Martin, C., see C. Michel **178**, 29
Martin, C., see F. Studer **178**, 324
Martinez, G., see D. Braithwaite **178**, 75
Mason, T.O., see A.K. Gangopadhyay **178**, 64

Merrien, N., see F. Studer **178**, 324
Michel, C., E. Suard, V. Caignaert, C. Martin, A. Maignan, M. Hervieu and B. Raveau, Neutron diffraction structure determination of the "1212"-series $TlBa_2Ca_{1-x}Nd_xCu_2O_{7-\delta}$ **178**, 29
Michel, C., see F. Studer **178**, 324
Mong, Q., see Y. Wang **178**, 287
Murakoshi, Y., S. Kambe and M. Kawai, Dramatic changes in the Bi and Cu valences of Bi 2201 phase annealing in absence of oxygen **178**, 71
Murata, K., see N.A. Fortune **178**, 437
Murray, B.G., see M.S. Raven **178**, 275

Narlikar, A.V., see S.B. Samanta **178**, 171
Nishihara, Y., see N.A. Fortune **178**, 437
Nojima, T. and T. Fujita, Universality of magnetization curves in superconducting Bi–Sr–Ca–Cu–O and Y–Ba–Cu–O films **178**, 140

O'Connor, M., see S.R. Su **178**, 81
Oda, Y. and M. Yamada, New superconducting phases in $La_2CuO_{4+\delta}$ annealed in high-pressure oxygen gas **178**, 158
Oganesyan, A.P., see V.A. Gasparov **178**, 445
Oh-Ishi, K., see T. Kajitani **178**, 397
Okayasu, S., see T. Ishida **178**, 301
Oppenheim, U.P., M. Katz, G. Koren, E. Polturak and M.R. Fishman, High temperature superconducting bolometer **178**, 26
Orlandi, P. and A. Rigamonti, Magnetically induced radiofrequency absorption in copper-oxide superconductors **178**, 197
Overmyer, D.L., see J.E. Schirber **178**, 137
Owens, F.J., Microwave absorption observation of melting of vortex lattice in $Tl_2Ba_2Ca_2Cu_3O_x$ **178**, 456

Pashkevich, Yu.G., see I.M. Vitebskii **178**, 189
Pavlyuk, A.D., see V.P. Djakonov **178**, 221
Plewa, J., see J. Hauck **178**, 405
Polturak, E., see U.P. Oppenheim **178**, 26
Pompa, M., see C. Li **178**, 421
Press, M.R. and S.S. Jha, Calculation of the normal state intraband electronic Raman scattering cross-section and the dielectric tensor in YBCO **178**, 305
Provost, J., see V. Hardy **178**, 255

Rajarajan, A.K., see A. Sundaresan **178**, 193
Rao, K.V.R. and K.B. Garg, MS-XANES analysis of Cu K-edge spectra of $YBa_2Cu_3O_{7-y}$ with variable oxygen content **178**, 352
Raveau, B., see C. Michel **178**, 29
Raveau, B., see V. Hardy **178**, 255
Raveau, B., see F. Studer **178**, 324
Raven, M.S., E.E. Inameti, B.G. Murray and Y.M. Wan, Quasi-static impedance and penetration depth of YBCO thin films **178**, 275
Rigamonti, A., see P. Orlandi **178**, 197
Romano, L.T., O.F. Schilling and C.R.M. Grovenor, Characterization of melt grown $Y_1Ba_2Cu_3O_{7-x}$ containing barium titanate inclusions II **178**, 41
Rossoni, P.G., see S.R. Su **178**, 81
Rusiecki, S., see D. Braithwaite **178**, 75
Rusiecki, S., see T. Krekels **178**, 383

Salama, K., see V. Selvamanickam **178**, 147
Samanta, S.B., P.K. Dutta, V.P.S. Awana, E. Gmelin and A.V. Narlikar, High resolution STM/STS studies of Bi–O redox layers and superconductivity in pure and substituted Bi-2122 high-T_c cuprate **178**, 171
Sasaki, T., see N. Toyota **178**, 339
Sastry, P.V.P.S.S., J.V. Yakhmi, R.M. Iyer, C.K. Subramanian and R. Srinivasan, Superconductivity of Bi-2201 ($n=1$) as influenced by the substitution of Pb and/or rare-earths (R = La, Nd and Pr) **178**, 110
Sato, H., see N. Toyota **178**, 339
Schilling, O.F., see L.T. Romano **178**, 41
Schirber, J.E., D.L. Overmyer, H.H. Wang, J.M. Williams, K.D. Carlson, A.M. Kini, U. Welp and W.-K. Kwok, Pressure dependence of the superconducting transition temperature of potassium fullerene, K_xC_{60} **178**, 137
Schmitt, M., see M. Huth **178**, 203
Seehra, M.S., see J. Zhao **178**, 432
Selvamanickam, V., K. Forster and K. Salama, Critical current anisotropy in liquid phase processed $YBa_2Cu_3O_x$ superconductors **178**, 147
Sharon, M., see A. Sundaresan **178**, 193
Shulga, S.V., O.V. Dolgov and E.G. Maksimov, Electronic states and optical spectra of HTSC with electron–phonon coupling **178**, 266
Skove, M.J., see T.M. Tritt **178**, 296
Sobolev, V.L., see I.M. Vitebskii **178**, 189
Srinivasan, R., see P.V.P.S.S. Sastry **178**, 110
Steeb, S., see A. Kottmann **178**, 125
Studer, F., N. Merrien, C. Martin, C. Michel, B. Raveau and A. Fontaine, Valence states of thallium and copper in some substituted thallium high-T_c superconductors by XAS and their influence on the critical temperature **178**, 324
Su, S.R., M. O'Connor, M. Levinson and P.G. Rossoni, Microstructural effects on superconducting properties of sintered $YBa_2Cu_3O_{7-x}$ wires **178**, 81
Suard, E., see C. Michel **178**, 29
Subramanian, C.K., see P.V.P.S.S. Sastry **178**, 110
Sundaresan, A., A.K. Rajarajan, L.C. Gupta, M. Sharon and R. Vijayaraghavan, Studies of the superconducting behaviour of $TlBa_{2-x}La_xCuO_{5-y}$ **178**, 193
Syono, Y., see T. Kajitani **178**, 397

Takahashi, T., see T. Ishida **178**, 231
Tanaka, S., see T. Kaneko **178**, 377
Tessema, G.X., see T.M. Tritt **178**, 296
Theuss, H. and H. Kronmüller, Paramagnetic properties of oxygen deficient $YBa_2Cu_3O_{7-\delta}$ polycrystals **178**, 37
Toyota, N., T. Sasaki, H. Sato and Y. Watanabe, Anomalies in static spin susceptibility and hydrogen bonding in high-T_c χ-

(BEDT-TTF)$_2$Cu(NCS)$_2$: possible valence mixing of Cu ions **178**, 339
Tritt, T.M., M. Marone, X.-F. Chen, M.J. Skove, A.C. Ehrlich, G.X. Tessema, D.J. Gillespie, J.P. Franck and J. Jung, Measure of the magnitude of Young's modulus in whisker-like samples of the Bi-based high-T_c materials $Bi_2Sr_2CaCu_2O_x$ and $Bi_2Sr_2Ca_2Cu_3O_x$ **178**, 296

Van Tendeloo, G., see T. Krekels **178**, 383
Vijayaraghavan, R., see A. Sundaresan **178**, 193
Vitebskii, I.M., A.V. Yeremenko, Yu.G. Pashkevich, V.L. Sobolev and S.A. Fedorov, One-magnon light scattering in exchange-noncollinear Nd_2CuO_4 **178**, 189
Voronin, G.F., see S.A. Degterov **178**, 213

Wagener, D., see M. Buchgeister **178**, 105
Wan, Y.M., see M.S. Raven **178**, 275
Wang, H.H., see J.E. Schirber **178**, 137
Wang, Y., L. Li, B. Li, Y. He and Q. Mong, Anomalous Hall effect in *C*-oriented high-T_c phase BiPbSrCaCuO thin film **178**, 287
Washburn, F.A., see T.B. Lindemer **178**, 93
Watanabe, Y., see N. Toyota **178**, 339
Welp, U., see J.E. Schirber **178**, 137
Wen, Z., see I. Iguchi **178**, 1
Williams, J.M., see J.E. Schirber **178**, 137

Yakhmi, J.V., see P.V.P.S.S. Sastry **178**, 110
Yamada, M., see Y. Oda **178**, 158
Yamauchi, H., see T. Kaneko **178**, 377
Yeremenko, A.V., see I.M. Vitebskii **178**, 189
Yokoyama, Y., see N.A. Fortune **178**, 437

Zhang, G.L., see L. Luo **178**, 11
Zhang, Y.H., see L. Luo **178**, 11
Zhao, J., V.S. Babu and M.S. Seehra, Observation of metastable field-cooled magnetization in Y doped Bi(2212) superconductors **178**, 432
Zheng, G.-Q., see K. Asayama **178**, 281
Zoli, M., Anomalous low-temperature specific heat in high-T_c superconductors. Presence of an intrinsic mechanism **178**, 390
Zubov, E.E., see V.P. Djakonov **178**, 221

Physica C178 (1991) 465–466
North-Holland

PHYSICA C

Analytic Subject Index to Volume 178

AC modulation technique 89
AC susceptibility
–of (Bi, Pb)$_{2+x}$Sr$_{2-y}$Ca$_{2+y}$Cu$_{3+z}$O$_{10+\delta}$ 203
–of Dy$_1$Ba$_2$Cu$_3$O$_{7-\delta}$ 89
–of GdBa$_2$Cu$_3$O$_{7-\delta}$ single crystal 221
Anderson model 266
Anisotropic superconductor 1, 51, 89, 147, 225, 255, 411
Antiferromagnetic order
–in GdBa$_2$Cu$_3$O$_{7-\delta}$ single crystal 221
–in Nd$_2$CuO$_4$ 189
Antiferromagnetic spin fluctuation 281
Applications of high-T_c superconductors 26, 81

Bi valence 71
Bolometers 26

Carrier concentration 29, 345, 414
–in La$_{2-x}$(Sr)$_x$CuO$_4$ 119
–in YBa$_2$Cu$_4$O$_8$ 75
Coherence length
–in Y$_1$Ba$_2$Cu$_3$O$_7$ 449
Composition determination by EPMA 365
Critical current density 11, 41, 64, 203
–in Dy$_1$Ba$_2$Cu$_3$O$_{7-\delta}$ 89
–in La$_{2-x}$(Sr)$_x$CuO$_4$ 119
–in YBa$_2$Cu$_3$O$_{7-x}$ wires 81
–in YBa$_2$Cu$_3$O$_x$ 147
–in Y–Ba–Cu–O 411
Critical phenomena
–of La$_{2-x}$(Sr)$_x$CuO$_4$ 119
Cu K edge 324
–of Cu$_2$O 352
–of CuO 352
–of La$_2$CuO$_4$ 421
–of YBa$_2$Cu$_3$O$_{7-y}$ 352
Cu L$_3$ edge
–of La$_2$CuO$_4$ 421
Cu–O chains 105, 405
–in YBa$_2$Cu$_3$O$_{7-\delta}$ 37
Cu–O planes 345, 414
Cu-valence 71, 110, 339, 352

Defect structures 41, 255, 383
Dielectric tensors
–in Y–Ba–Cu–O 305
D-wave superconductor 182, 281

Electrical resistivity
–in Y$_1$Ba$_2$Cu$_3$O$_7$ 449
Electron-doped superconductor
–of Nd$_{2-x}$Ce$_x$CuO$_y$ 437
Electronic structure 266, 324
–of Cu$_2$O 352
–of CuO 352
–of La$_2$CuO$_4$ 421
–of Nd$_{2-x-y}$Ce$_x$Sr$_y$CuO$_4$ 345
–of YBa$_2$Cu$_3$O$_7$ 414
–of YBa$_2$Cu$_3$O$_{7-y}$ 352
Electron–phonon coupling 266
Electron probe microanalysis 64
Encapsulation 377
Energy gap 171, 182
ESR 231

Fermi liquid 266
Fluctuation effects
–in Y$_1$Ba$_2$Cu$_3$O$_7$ 449
Flux creep
–in Bi$_2$Sr$_2$CaCu$_2$O$_8$ 140
–in YBa$_2$Cu$_3$O$_{7-\delta}$ 140
Flux dynamics 161, 225
–in Tl$_2$Ba$_2$Ca$_2$Cu$_3$O$_x$ 456
Flux lattice 51
–in Tl$_2$Ba$_2$Ca$_2$Cu$_3$O$_x$ 456
Flux pinning 11, 41
–in YBa$_2$Cu$_3$O$_{7-\delta}$ 225
–in YBa$_2$Cu$_3$O$_x$ 147
Flux pinning, enhancement of 255
Fullerene 137

Ginzburg–Landau theory 51
γ-irradiation effect 11
Grain alignment (texturing) 147
Granular superconductivity
–in (Bi, Pb)$_{2+x}$Sr$_{2-y}$Ca$_{2+y}$Cu$_{3+z}$O$_{10+\delta}$ 203
–in Bi$_2$Sr$_2$Ca$_{1-x}$Y$_x$Cu$_2$O$_{8+\delta}$ 432
–in Bi$_2$Sr$_2$CaCu$_2$O$_8$ 197
–in YBa$_2$Cu$_4$O$_7$ 197

Hall effect
–in BiPbSrCaCuO thin film 287
–in Nd$_{2-x}$Ce$_x$CuO$_y$ 437
Heavy-fermion compounds 15
High pressure effect
–in K$_x$C$_{60}$ 137
–in La$_{2-x}$Sr$_x$CuO$_4$ 281
–in Nd$_{2-x-y}$Ce$_x$Sr$_y$CuO$_4$ 345
–in Tl$_2$Ba$_2$CuO$_{6+y}$ 281
–in YBa$_2$Cu$_3$O$_7$ 281, 414
–in YBa$_2$Cu$_4$O$_8$ 75
HREM 383
Hubbard Hamiltonian 182
Hydrogenation
–of PrBa$_2$Cu$_3$O$_{6.8}$ 317
–of YBa$_2$Cu$_3$O$_{6.3}$ 317
Hydrogen bonding 339

Impurities 15
Infrared detectors 26
Infrared spectroscopy 11
Irradiation effect
–in Tl$_2$Ba$_2$Ca$_2$Cu$_3$O$_{10}$ 255
–in Tl$_2$Ba$_2$CaCu$_2$O$_8$ 255
–in TlBa$_2$Ca$_2$Cu$_3$O$_9$ 255
–in YBCO 11
Irreversibility field 140

Lattice dynamics
–of YBa$_2$Cu$_3$O$_{7-\delta}$ 225
Layered HTSCs 161
Low frequency impedance 275
Luttinger liquid 266

Magnetic susceptibility 301
–of Bi$_2$Sr$_2$Ca$_{n-1}$Cu$_n$O$_{2n+4}$ 231
–of Bi$_2$Sr$_2$CuO$_{\sim 6}$ 110
–of κ–(BEDT–TTF)$_2$Cu(NCS)$_2$ 339
–of YBa$_2$Cu$_3$O$_{7-\delta}$ 37
Magnetization
–in Bi$_2$Sr$_2$Ca$_{1-x}$Y$_x$Cu$_2$O$_{8+\delta}$ 432
–of Bi$_2$Sr$_2$CaCu$_2$O$_8$ 140
–of GdBa$_2$Cu$_3$O$_{7-\delta}$ single crystal 221
–of Nd$_2$CuO$_4$ 189
–of YBa$_2$Cu$_3$O$_{7-\delta}$ 140
Meissner effect
–in YBa$_2$Cu$_3$O$_{6+y}$ 64
Microwave absorption
–in Tl$_2$Ba$_2$Ca$_2$Cu$_3$O$_x$ 456
–of Bi$_2$Sr$_2$CaCu$_2$O$_8$ 197
–of YBa$_2$Cu$_4$O$_7$ 197
Multiple scattering 352, 421

Neutron diffraction 29
New superconducting phase 158
NMR 182, 281
Normal-state properties
–of BiPbSrCaCuO thin film 287
–of κ–(BEDT–TTF)$_2$Cu(NCS)$_2$ 339
–of $Y_1Ba_2Cu_3O_7$ 449
NQR 281

O K edge
–of La_2CuO_4 421
Optical absorption 266
Optical reflectivity 266
Organic superconductor
–of κ–(BEDT–TTF)$_2$Cu(NCS)$_2$ 339
O–T transition 105, 213
Oxygen diffusion
–in $YBa_2Cu_3O_{7-\delta}$ 37
Oxygen stoichiometry 105, 171, 352, 397
–in $BaCu_2O_2$ 93
–in BaCuO2 93
–in (Bi, Pb)$_{2+x}Sr_{2-y}Ca_{2+y}Cu_{3+z}O_{10+\delta}$ 203
–in $Bi_{2-x}Pb_xSr_{2-y}M_yCuO_{6+z}$ 71
–in $(La,Pb)_2SrCu_2O_x$ 405
–in $La_2CuO_{4+\delta}$ 158
–in $Nd_{2-x}Ce_xCuO_y$ 437
–in $Pb_{0.5}SrLaCu_{1.5}O_x$ 405
–in $Pb_2Sr_2Y_{0.5}Ca_{0.5}Cu_3O_x$ 405
–in $Pb_2SrLaCu_2O_x$ 405
–in $PbBaSrYCu_3O_x$ 405
–in $TlBa_2Ca_{1-x}Nd_xCu_2O_{7-\delta}$ 29
–in $TlBa_2CuO_{5-y}$ 193
–in $YBa_2Cu_3O_{7-\delta}$ 225
–in $YBa_3Cu_2O_6$ 93

Partial DOS 125
Penetration depth 275, 445
–in $Y_1Ba_2Cu_3O_7$ 449
Phase diagram
–of $BaCu_2O_2$ 93
–of $BaCuO_2$ 93
–of $La_2CuO_{4+\delta}$ 158
–of $La_{2-x}(Sr)_xCuO_4$ 119
–of lead containing cuprates 405
–of $Y_2Ba_4Cu_7O_{14+z}$ 213
–of $YBa_2Cu_3O_{6+z}$ 213
–of $YBa_2Cu_4O_8$ 213
–of $YBa_3Cu_2O_6$ 93
Phase diagram, magnetic 221
Phenol 301
Polarized XES 125
Postannealing 377
Pressure dependence of T_c
–in K_xC_{60} 137
Proximity effect 1

Quantum tunneling of apex oxygen 390
Quenching
–of $Bi_{1.8}Pb_{0.2}Sr_2CaCu_2O_8$ 301
–of $Pr_{2-x}Ce_xCuO_4$ 397

Radiofrequency absorption 197
Raman scattering
–in Nd_2CuO_4 189
–in $PrBa_2Cu_3O_{6.8}$ 317
–in $YBa_2Cu_3O_{6.3}$ 317
–in Y–Ba–Cu–O 305
RF technique measurement
–of penetration depth 445

Scanning electron microscopy 365
Scanning tunneling microscopy
–of $Bi_2Ca_1Sr_2Cu_2O_8$ 171
Shear structures of 123 383
Specific heat, at low-T 390
Specific heat, at T_c 15
Stoichiometry of single crystals 365
Structural phase transition 93
–in $Bi_{2-x}Pb_xSr_{2-y}M_yCuO_{6+z}$ 71
Structure
–of $Bi_{2-x}Pb_xSr_{2-x}R_xCuO_y$ 110
–of $Pr_{2-x}Ce_xCuO_4$ 397
–of $TlBa_2Ca_{1-x}Nd_xCu_2O_{7-\delta}$ 29
–of $Y_2Ba_4Cu_7O_{15}$ 383
Substitution effects 29, 41
–in $Bi_2Ca_1Sr_2Cu_2O_8$ 171
–in $Bi_2Sr_2CuO_{\sim 6}$ 110
–in $TlBa_{2-x}La_xCuO_{5-y}$ 193
–in $YBa_2Cu_3O_{6+y}$ 64
–in $YBa_2Cu_3O_{7-\delta}$ 105
Substitution effects of Ca
–in $Tl_1Ba_2CaCu_2O_7$ 324
–in $Tl_2Ba_2Ca_1Cu_2O_8$ 324
Surface impedance
–of $Y_1Ba_2Cu_3O_{7-x}$ thin films 445
S-wave 15
Synthesis
–of $Bi_{1.8}Pb_{0.2}Sr_2CaCu_2O_8$ 301
–of lead containing cuprates 405
–of $Nd_{2-x}Ce_xCuO_y$ 437
–of $Tl_{1.7}Ba_2Cu_{2.3}Cu_3O_z$ 377

Thermodynamic properties
–of $Y_2Ba_4Cu_7O_{14+z}$ 213
–of $YBa_2Cu_3O_{6+z}$ 213
–of $YBa_2Cu_4O_8$ 213
Thin films 1, 26, 41
–of $Bi_2Sr_2CaCu_2O_8$ 140
–of $Y_1Ba_2Cu_3O_7$ 449
–of $Y_1Ba_2Cu_3O_{7-x}$ 445
–of $YBa_2Cu_3O_{7-\delta}$ 140
–of Y–Ba–Cu–O 275
Tl L_3 edge 324
Transmission electron microscopy (TEM) 41
Tunneling 1
Twin boundaries 75, 411
Two-fluid theory 275

Vortices 161

Weak links
–in (Bi, Pb)$_{2+x}Sr_{2-y}Ca_{2+y}Cu_{3+z}O_{10+\delta}$ 203
Whiskers
–of $Bi_2Sr_2Ca_2Cu_3O_x$ 296
–of $Bi_2Sr_2CaCu_2O_x$ 296

XANES 324, 352, 421
X-ray emission
–of YBaCuO 125
XRD 110
–of $YBa_2Cu_3O_{7-\delta}$ 105

Young's modulus
–in $Bi_2Sr_2Ca_2Cu_3O_x$ 296
–in $Bi_2Sr_2CaCu_2O_x$ 296

Physica C178 (1991) 467–468
North-Holland

PHYSICA C

Materials Index to Volume 178

$BaCu_2O_2$
–oxygen stoichiometry 93
–phase diagram 93
$BaCuO_2$
–oxygen stoichiometry 93
–phase diagram 93
$(Bi,Pb)_{2+x}Sr_{2-y}Ca_{2+y}Cu_{3+z}O_{10+\delta}$
–AC susceptibility 203
–granular superconductivity 203
–oxygen stoichiometry 203
–weak links 203
$Bi_{1.8}Pb_{0.2}Sr_2CaCu_2O_8$
–quenching 301
–synthesis 301
$Bi_2Ca_1Sr_2Cu_2O_8$
–scanning tunneling microscopy 171
–substitution effects 171
$Bi_2Sr_2Ca_{1-x}Y_xCu_2O_{8+\delta}$
–granular superconductivity 432
–magnetization 432
$Bi_2Sr_2Ca_2Cu_3O_x$
–whiskers 296
–Young's modulus 296
$Bi_2Sr_2CaCu_2O_8$
–flux creep 140
–granular superconductivity 197
–magnetization 140
–microwave absorption 197
–thin films 140
$Bi_2Sr_2CaCu_2O_x$
–whiskers 296
–Young's modulus 296
$Bi_2Sr_2Ca_{n-1}Cu_nO_{2n+4}$
–magnetic susceptibility 231
$Bi_2Sr_2CuO_{\sim 6}$
–magnetic susceptibility 110
–substitution effects 110
$Bi_{2-x}Pb_xSr_{2-x}R_xCuO_y$
–structure 110
$Bi_{2-x}Pb_xSr_{2-y}M_yCuO_{6+z}$
–oxygen stoichiometry 71
–structural phase transition 71
BiPbSrCaCuO
–Hall effect 287
–normal-state properties 287

Cu_2O
–Cu K edge 352
–electronic structure 352

$Dy_1Ba_2Cu_3O_{7-\delta}$
–AC susceptibility 89
–critical current density 89

$GdBa_2Cu_3O_{7-\delta}$
–AC susceptibility 221
–antiferromagnetic order 221
–magnetization 221

K_xC_{60}
–high pressure effect 137
–pressure dependence of T_c 137
κ–$(BEDT-TTF)_2Cu(NCS)_2$
–magnetic susceptibility 339
–normal-state properties 339
–organic superconductor 339

$(La,Pb)_2SrCu_2O_x$
–oxygen stoichiometry 405
La_2CuO_4
–Cu K edge 421
–Cu L_3 edge 421
–electronic structure 421
–O K edge 421
$La_2CuO_{4+\delta}$
–oxygen stoichiometry 158
–phase diagram 158
$La_{2-x}(Sr)_xCuO_4$
–carrier concentration 119
–critical current density 119
–critical phenomena 119
–phase diagram 119
$La_{2-x}Sr_xCuO_4$
–high pressure effect 281

Nd_2CuO_4
–antiferromagnetic order 189
–magnetization 189
–Raman scattering 189
$Nd_{2-x}Ce_xCuO_y$
–electron-doped superconductor 437
–Hall effect 437
–oxygen stoichiometry 437
–synthesis 437
$Nd_{2-x-y}Ce_xSr_yCuO_4$
–electronic structure 345
–high pressure effect 345

$Pb_{0.5}SrLaCu_{1.5}O_x$
–oxygen stoichiometry 405
$Pb_2Sr_2Y_{0.5}Ca_{0.5}Cu_3O_x$
–oxygen stoichiometry 405
$Pb_2SrLaCu_2O_x$
–oxygen stoichiometry 405
$PbBaSrYCu_3O_x$
–oxygen stoichiometry 405
$Pr_{2-x}Ce_xCuO_4$
–quenching 397
–structure 397
$PrBa_2Cu_3O_{6.8}$
–hydrogenation 317
–Raman scattering 317

$Tl_{1.7}Ba_2Cu_{2.3}Cu_3O_z$
–synthesis 377
$Tl_1Ba_2CaCu_2O_7$
–substitution effects of Ca 324
$Tl_2Ba_2Ca_1Cu_2O_8$
–substitution effects of Ca 324
$Tl_2Ba_2Ca_2Cu_3O_{10}$
–irradiation effect 255
$Tl_2Ba_2Ca_2Cu_3O_x$
–flux dynamics 456
–flux lattice 456
–microwave absorption 456
$Tl_2Ba_2CaCu_2O_8$
–irradiation effect 255
$Tl_2Ba_2CuO_{6+y}$
–high pressure effect 281
$TlBa_2Ca_{1-x}Nd_xCu_2O_{7-\delta}$
–oxygen stoichiometry 29
–structure 29
$TlBa_2Ca_2Cu_3O_9$
–irradiation effect 255
$TlBa_2CuO_{5-y}$
–oxygen stoichiometry 193
$TlBa_{2-x}La_xCuO_{5-y}$
–substitution effects 193

$Y_1Ba_2Cu_3O_7$
–coherence length 449
–electrical resistivity 449
–fluctuation effects 449
–normal-state properties 449
–penetration depth 449
–thin films 449
$Y_1Ba_2Cu_3O_{7-x}$

–surface impedance 445
–thin films 445
$Y_2Ba_4Cu_7O_{14+z}$
–phase diagram 213
–thermodynamic properties 213
$Y_2Ba_4Cu_7O_{15}$
–structure 383
$YBa_2Cu_3O_{6+y}$
–Meissner effect 64
–substitution effects 64
$YBa_2Cu_3O_{6+z}$
–phase diagram 213
–thermodynamic properties 213
$YBa_2Cu_3O_{6.3}$
–hydrogenation 317
–Raman scattering 317
$YBa_2Cu_3O_7$
–electronic structure 414
–high pressure effect 281, 414
$YBa_2Cu_3O_{7-\delta}$
–Cu–O chains 37
–flux creep 140
–flux pinning 225
–lattice dynamics 225
–magnetic susceptibility 37
–magnetization 140
–oxygen diffusion 37
–oxygen stoichiometry 225
–substitution effects 105
–thin films 140
–XRD 105
$YBa_2Cu_3O_{7-x}$
–critical current density 81
$YBa_2Cu_3O_{7-y}$
–Cu K edge 352
–electronic structure 352
$YBa_2Cu_3O_x$
–critical current density 147
–flux pinning 147
$YBa_2Cu_4O_7$
–granular superconductivity 197
–microwave absorption 197
$YBa_2Cu_4O_8$
–carrier concentration 75
–high pressure effect 75
–phase diagram 213
–thermodynamic properties 213
$YBa_3Cu_2O_6$
–oxygen stoichiometry 93
–phase diagram 93
Y–Ba–Cu–O
YBaCuO
–critical current density 411
–dielectric tensors 305
–Raman scattering 305
–thin films 275
–X-ray emission 125